

REMARKS

I. Oath/Declaration

A supplemental declaration in compliance with 37 CFR § 1.67(a) was submitted on October 4, 2007, a copy of which is enclosed herewith.

II. Amendment / Additional Claim

Claims 1-12 are currently pending. Claim 1 is currently amended and is supported in the specification at page 5, lines 10-13 and 16-28, and in FIGURES 1 and 2. Claims 6-11 were withdrawn from consideration. Claims 4 and 5 are canceled.

III. Objections to Claims 1-3 and 13

Claim 1 is currently amended to recite that the sensor is adapted to be affixed to a respiratory circuit, as according to the Examiner's suggestion. As Claims 2, 3, and 13 depend from Claim 1, the objection is addressed with respect to these Claims as well.

IV. Rejections Under 35 U.S.C. § 103(a)

Claims 1, 2 and 13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Clawson et al., U.S. Patent No. 4,453,835 (hereafter "Clawson") in view of Tillotson et al., U.S. Patent No. 5676132 (hereafter "Tillotson"). Claim 1 is currently amended. Claims 2 and 13 depend from Claim 1.

The Office Action states that Clawson "has a protrusion which is comprised of element 62, which has a curved heat transfer suppressing portion 60 connected thereto . . ." (Office Action p. 3.) And that "only the sheath portion extending outwardly from the housing is in the circuit . . ." The Examiner admits that Clawson does not show the temperature sensing probe in a respiratory circuit and alleges that Tillotson makes up for this deficiency in that Tillotson shows the "typical position of a temperature sensor in a respiratory circuit." (Office Action p. 3.)

Based on the Examiner's own argument in the above-quoted sections of the Office Action, neither Clawson by itself nor in combination with Tillotson render applicants' Claims obvious under Section 103(a) since neither teach or suggest applicants' elements of a holder to hold a sensor in an inspired air flow path, the holder having a heat transfer suppressing portion that suppresses temperature transfer from the exterior of the inspired air flow path to the sensor, wherein the holder has an extended protrusion extending from the holder main body towards the inside of the respiratory flow path, and the heat transfer suppressing portion being formed on the extended protrusion. As the Examiner himself states, the protrusion of Clawson 62 is connected to a curved heat transfer suppressing portion, represented as part 60. This relationship is illustrated in Clawson FIG. 4 and the low thermal conductivity of Clawson's curved projection 60 is discussed at Clawson, Col. 5, line 1. Thus, Clawson's heat transfer suppressing portion cannot be formed on the extended protrusion, as recited by applicants' Claim 1.

Further, Clawson's curved portion 60 does not correspond to the heat transfer suppressing portion of applicants' Claim 1 given the current amendment which clarifies that the curved portion of the extended protrusion suppresses the temperature transfer from the exterior of the inspired air flow path to the sensor by using heat exchange between the curved portion and the inspired air flow path within the respiratory circuit. According to Tillotson, Clawson's curved portion 60 is not inside the respiratory circuit since only the temperature detecting portion extends into the interior of the respiratory circuit tube and into the flow of air passing therethrough (Tillotson, Col. 6, lines 4-6). Thus, since Tillotson teaches that Clawson's curved portion 60 cannot be in the respiratory circuit, *i.e.*, it is not exposed to airflow (Clawson affirms that this is the case at Col. 3, lines 34-40), Clawson's curved portion cannot suppress temperature transfer from the exterior of the inspired air flow path to the sensor by using heat exchange

between the curved portion and the inspired air flow path with the respiratory circuit. Accordingly, applicants' Claim 1 is not obvious based on either Clawson alone or Clawson in light of Tillotson.

The Examiner additionally alleges that "based on the relative size of the sheath and the housing 60 and 62, it is clear that protrusion [sic] has a length longer than the diameter of the circuit." Applicants fail to see how this relationship is "clear" and the Office Action fails to provide any relevant explanation. As discussed, Clawson itself teaches that the sensor sheath is subjected to the gas whose temperature is to be measured (Col. 3, lines 34-37). Clawson's sensor sheath is straight. The curved portion of Clawson's probe 60 is not inside of the circuit. It would be impossible for Clawson's sheath, given that it is straight, to be longer than a diameter of the respiratory circuit. Thus, Clawson fails to teach an extended protrusion that is longer than a diameter of the respiratory circuit as is recited in applicants' Claim 1.

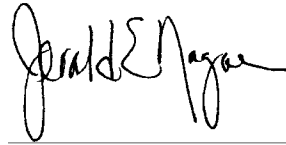
Claims 2 and 13 are not obvious under 35 U.S.C. § 103(a) for the same reasons, since Claim 2 depends from Claim 1. Additionally, the Examiner alleges that with respect to Claim 13, "the heater is inherently upstream of the sensor," and that whether to install the device with the curve facing left or right would have been a mere matter of design choice for one skilled in the art. To the contrary, the direction of the curved portion is not a mere matter of design choice. The precision of measurement of the temperature of the inspired air flow is dependent on the direction of the curved portion, as described at page 5, lines 10-13 of applicants' specification. When the extended protrusion is curved in the direction of the heater, heat exchange between the curved portion and the inspired air takes place downstream of the temperature sensor, resulting in more accurate temperature measurements thereby more accurate control of the temperature of air supplied to the patient.

V. Conclusion

With the foregoing amendments and remarks, applicants respectfully submit that all of the claims in the present application are now in condition for allowance and early reconsideration to this end is respectfully requested.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read "Jerald E. Nagae", written over a horizontal line.

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Attorney Docket No. NAI1121791

**SUPPLEMENTAL COMBINED DECLARATION AND POWER OF ATTORNEY
IN PATENT APPLICATION**

As a below-named inventor, I hereby declare that:

my residence, mailing address, and citizenship are as stated below next to my name.

I believe that I am an original, first, and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled INSPIRED AIR TEMPERATURE MEASURING DEVICE IN RESPIRATORY CIRCUIT, the specification of which was filed on November 20, 2003, as United States Application No. 10/717,722.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment submitted at the time of or after filing of the application, including any amendment submitted herewith; and the subject matter of the application as amended was part of my invention and was invented before the filing date of the application.

I acknowledge the duty to disclose to the U.S. Patent and Trademark Office all information known to me which is material to the patentability of this application as defined in 37 C.F.R. 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below, and I have also identified below any foreign application for patent or inventor's certificate, or any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application No(s).	Country	Foreign Filing Date Month/Day/Year	Priority Claimed Yes/No
2001-154007	Japan	May 23, 2001	Yes

I hereby appoint the practitioners associated with Customer No. 26389 as the attorneys to prosecute the application identified above and to transact all business in the United States Patent and Trademark Office connected therewith.


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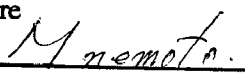
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I hereby further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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